Table 1 - Correlation of RU Comments with DSF Review Report Sections<sup>1</sup>

## **DSF REPORT SECTION NUMBERS**

**OTHER** 

No		4.2.2.1	4.2.2.2	4.2.2.3	4.2.2.4	4.3.2.1	4.3.2.2	4.3.2.3	4.3.2.4	4.3.2.5	1.3.2.6	4.3.2.7	1.3.2.8	1.3.3.1	4.3.3.2	4.3.3.3	4.3.3.4	4.3.3.5	D o	T e c	M i S
NO.	SUBJECT	-	7		,	_	7	7	7		7	7	7	,	7	,	,	,	c	h	С
A-01	Cell/cave passive confinement DSFs			X				3.7	3.7	X										<del>                                     </del>	$\vdash$
A-02	DFs in unmitigated consequence estimates	37	37					X	X			37								$\vdash$	$\vdash$
B-01	Cold chemical feed hazards and ITS SSCs	X	X									X								<del>                                     </del>	$\vdash$
B-02	Steam overpressure of melters		X																	<sup> </sup>	$\vdash$
B-04	Protection of ex-cell SSCs from aircraft crash		X																		igsquare
B-05	Design information on flask				X	-														X	$\sqcup$
B-06	Design approaches for vessel integrity groups				X															<u>                                     </u>	
E-01	HAR hazards inadequately addressed		X												X					<u> </u>	
G-01	MAR characteristics in Cs storage tank						X		X											<u> </u>	Ш
G-02	Corrosion failure of cooling coils						X													<u> </u>	
G-03	Solids concentration in LAW feed						X		X											<u> </u>	
G-04	ITS SSCs/DSFs for LAW vitrification and LAW feed		X																		
	tank																			<u> </u>	
G-05	ITS SSCs/DSFs for managing entrained solids product		X																		Ш
H-01	Misinterpretation of NFPA 69													X							
H-02	Unfiltered cell venting – H <sub>2</sub> control																			X	
H-03	Maintenance of passive H <sub>2</sub> control provisions																			X	
H-04	Justification of standards					X															
H-05	Inconsistent information																		X		
H-06	Frequency estimate for chemical hazard evaluation											X									
H-07	Human failure frequency vs. CM/CC frequency																			X	
H-08	Long-term availability of passive H <sub>2</sub> control									X											
H-09	Sample bottle/carrier hazard control credit																			X	
H-10	Confusion of mitigated and unmitigated frequency																		X		
H-11	MAR radionuclide concentration						X		X												
H-12	Monitoring H <sub>2</sub>													X							
H-13	Calculation of nitric acid concentration in air						X														
H-14	Calculation of nitric acid concentration in control room	ĺ					X														
H-15	Calculation of nitric acid endpoint distances						X														
J-01	Crediting ductwork DFs							X	X												

<sup>&</sup>lt;sup>1</sup> Shaded cells indicate that comments are referenced in the body of this report.

		4.2.2.1	4.2.2.2	4.2.2.3	4.2.2.4	4.3.2.1	4.3.2.2	4.3.2.3	4.3.2.4	4.3.2.5	4.3.2.6	4.3.2.7	4.3.2.8	4.3.3.1	4.3.3.2	4.3.3.3	4.3.3.4	4.3.3.5	D	T e	M i
NO.	SUBJECT	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	o c	c h	S
J-02	Fault tree confusion																			X	
J-03	Justification of standards					X															
J-04	Confusing information																		X		
J-05	Inadequate fault trees																			X	
J-06	Entrainment of material by air flow over pool						X														
J-07	Justification of standards					X															
J-08	ARF for slow boiling in heat generating tanks						X		X												
J-09	Basis for LAW transfer line break frequency															X					
K-02	DFs as ITS SSCs/DSFs								X												
K-03	Single barrier exception to defense in depth-flask														X						
K-04	Justification of 10 mg/m <sup>3</sup>						X		X												
K-05	DFs in unmitigated consequence estimates							X	X												
K-06	Justification of control strategy																X				
K-07	Consistency of unmitigated results																			X	
K-08	Conservatism of consequence estimates						X	X	X												
K-09	Adequacy of tank passive cooling						X			X											
K-10	Unmitigated dose estimate						X	X	X												
M-01	Basis for severity level assignment	X																			
M-02	Design changes in Authorization Basis																				X
M-03	Inconsistent information																		X		
M-05	Seismic requirements for wet chemical storage	X	X																		
M-06	NPH protection for fire pump house and water tank										X										
M-07	Sellafield vs. TWRS-P practices				X								X								
M-08	Inconsistent terminology with the SRD	X																			
M-09	Explanation of dip tube				X																
M-10	Explanation of live loading of flanges				X																
M-11	Confusing information																		X		
M-13	ITS SSCs/DSFs for instrument air	X	X																		
M-14	ITS SSCs/DSFs for cooling system heat exchanger		X																		
M-15	Cooling of multiple vessels with common system		X																		
M-16	Incomplete information				X																
M-18	ITS SSCs/DSFs for cold chemical feed	1	X									X									$\Box$
M-19	Insufficient information for RFDs and diode pumps				X																
M-20	Insufficient information				X																
M-21	Additional hazard conditions and ITS SSCs/DSFs	1	X						l	<u> </u>			<u> </u>			l					

NO.	SUBJECT	4.2.2.1	4.2.2.2	4.2.2.3	4.2.2.4	4.3.2.1	4.3.2.2	4.3.2.3	4.3.2.4	4.3.2.5	4.3.2.6	4.3.2.7	4.3.2.8	4.3.3.1	4.3.3.2	4.3.3.3	4.3.3.4	4.3.3.5	D o c	T e c h	M i S
M-23	Safety implications of non-uniform slurries		X																	ш	С
M-24	Fire hazard in HLW melter		X																		$\vdash$
M-25	ITS SSCs/DSFs for melter cooling system control		Λ	X																	$\vdash$
M-26	ITS SSCs/DSFs for Sr/TRU hazards	+	X	21		-													-		
M-27	Credible fires impacting safety	X	X			1															$\vdash$
M-28	Insufficient single failure information	Λ	Λ		X	1															$\vdash$
M-29	Insufficient information			X	Λ																$\vdash$
O-01	Frequency of pump maintenance/handling			Λ			X	X													$\vdash$
O-01 O-02	Reliance on operator training in unmitigated doses						Λ	X													$\vdash$
O-02 O-03	Information unavailable on dispersion volume-worker							Λ					X								$\vdash$
O-03	Inclusion of discussion on flask active systems												Λ						X		$\vdash$
O-04 O-06	Load suspension time						X	X											Λ		$\vdash$
O-00 O-07	Interpretation of failure rate information						Λ	Λ					X								$\vdash$
Q-01	Inappropriate strategy												Λ							X	$\vdash$
P-03	Elimination of gamma detector																			Λ	X
P-08	Basis for programmatic recovery factor																			X	Λ
P-018	Leak detection methods and interlock logic																		X	Λ	$\vdash$
P-24	Tracking of "open issues"																		X		$\vdash$
O-04	Inconsistent description of strategy																	X	Λ		$\vdash$
Q-04 Q-05	Meaning of "composite" strategy																	X			$\vdash$
Q-05 Q-06	Inconsistent discussion of need for tank cooling																	Λ		X	$\vdash$
Q-00 Q-07	Conflicting safety functions																			X	$\vdash$
Q-07 Q-10	Insufficient justification of frequency data												X							Λ	$\vdash$
Q-10 Q-11	Insufficient justification of frequency data					1							X								$\vdash$
Q-11 Q-12	Seismic requirements on cooling system head tank	+				-							71						-	X	
Q-12 Q-14	Insufficient justification-single failure compliance	+				-													-	X	
Q-14 Q-16	Conservative failure rate of cooling coils						X													71	
Q-10 Q-17	Cooling system depressurization frequency	+				-	21						X						-		
Q-17 Q-18	Insufficient discussion of engineering evaluation	+				-							71						X		
Q-18 Q-19	Insufficient explanation of failure rate	-				-													X		$\vdash$
Q-19 Q-20	Seismically induced cooling system pipe break	-				-														X	$\vdash$
Q-20 Q-21	Insufficient explanation	-				-													X	11	$\vdash$
Q-21 Q-22	Inconsistent explanation					-													X		$\vdash$
Q-22 Q-23	Dismissal of cooling jacket option	+	1			1	1			1		1	1		1						X